(No Model.)

W. H. BRILL.

CAR COUPLING.

No. 490,799. Patented Jan. 31, 1893.

FIG. 1.

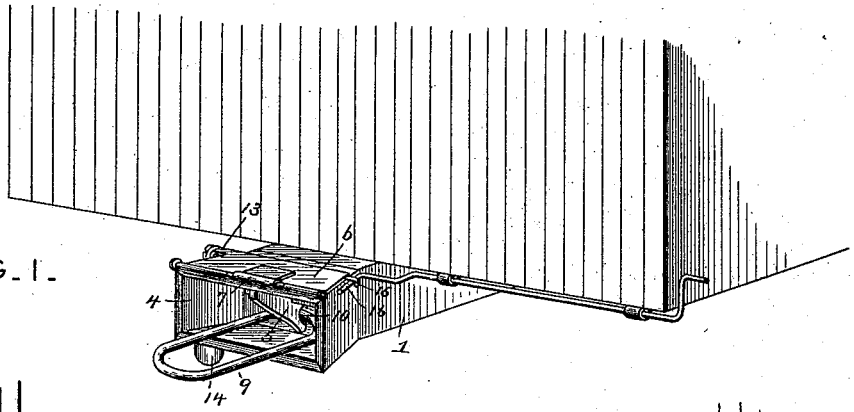


FIG. 2.

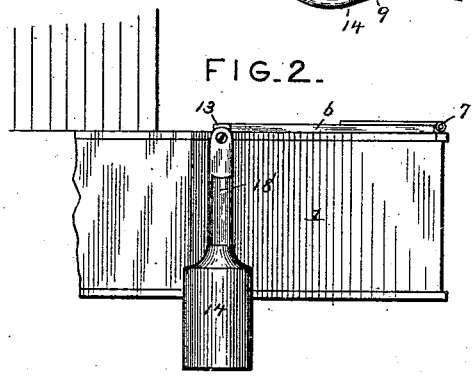


FIG. 3.

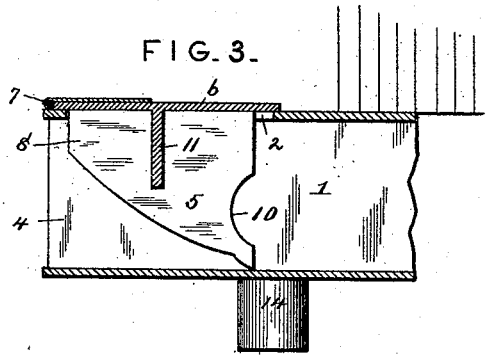


FIG. 4.

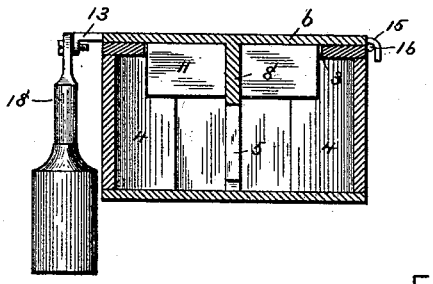


FIG. 5.

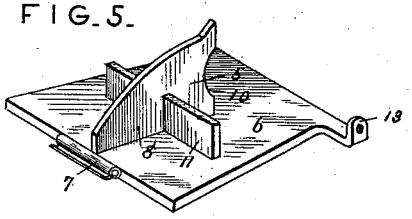
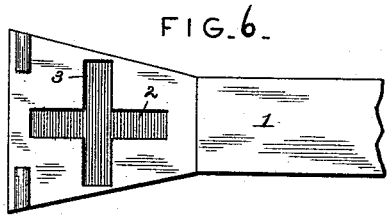


FIG. 6.



Witnesses

Harry L. Amer.

N. F. Riley

Inventor

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By his Attorneys,

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UNITED STATES PATENT OFFICE.

WILLIAM H. BRILL, OF WILLOW SPRINGS, ASSIGNOR OF ONE-HALF TO GEORGE FLINT, OF DE SOTO, MISSOURI.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 490,799, dated January 31, 1893.

Application filed June 24, 1892. Serial No. 437,848. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM H. BRILL, a citizen of the United States, residing at Willow Springs, in the county of Howell and State of Missouri, have invented a new and useful Car-Coupling, of which the following is a specification.

The invention relates to improvements in car-couplings.

The object of the present invention is to provide a simple and inexpensive car coupling, which will automatically couple when cars come together, and which will also automatically uncouple when a car is derailed and the coupling link is twisted to prevent one car from throwing another off the track.

The invention consists in the construction and novel combination and arrangement of parts hereinafter fully described, illustrated in the accompanying drawings and pointed out in the claims hereto appended.

In the drawings—Figure 1 is a perspective view of a car coupling constructed in accordance with this invention. Fig. 2 is a side elevation. Fig. 3 is a longitudinal sectional view. Fig. 4 is a transverse sectional view. Fig. 5 is a detail perspective view of the hook. Fig. 6 is a plan view of the draw-head, the link being removed.

Like numerals of reference indicate corresponding parts in all the figures of the drawings.

1 designates a draw-head provided in its top with longitudinal and transverse openings 2 and 3 which communicate with its longitudinal link opening or cavity 4, and through which extends a hook 5 depending from the top of the draw-head and adapted to be engaged by a link. The hook consists of a plate 6 arranged on top of the draw-head and hinged at its front end by a pintle 7 to the draw-head, a longitudinal flange 8 forming the hook proper and having its front edge beveled to enable it to be readily lifted by a link 9 entering the draw-head, and provided in its rear edge which is vertical, with a curved notch 10 to receive the link when the latter is coupled. The lower end or point of the hook-flange 8 is arranged in a slight depression in the bottom of the draw-head, the hook is provided on opposite sides of the longitudinal hook-flange 8 with depending lateral flanges 11, which are adapted to be engaged by the sides of the link, should the latter be twisted by a car being derailed or falling over an embankment or the like, whereby the hook will be lifted to uncouple the cars automatically to prevent one car derailing or dragging another one down an embankment. The inner end of the plate is provided at one side with an L-shaped arm 13 to which is attached a weight 14, and at the opposite side with a hook 15 which is engaged by an arm 16 of a bell-crank lever, whereby the hook is lifted to uncouple cars from one side to prevent a person going between the cars. The weight 14 is provided with a stem 18, which has an opening at its upper end through which passes a screw which secures the stem to the L-shaped arm, and the said weight is adapted to prevent the hook accidentally rising and uncoupling cars when the latter are in an upright position on the track.

It will be seen that the car-coupling is simple and comparatively inexpensive in construction, that it is capable of automatic coupling, and that it is adapted to uncouple automatically should a car be turned over to prevent the same dragging another car after it.

What I claim is—

1. In a car coupling the combination of a draw-head having in its top longitudinal and transverse openings, a hook hinged to the draw-head and depending through the longitudinal opening and the vertically arranged oppositely disposed lateral flanges depending through transverse openings and adapted to engage the upper face of a link, substantially as described.

2. In a car coupling, the combination of a draw-head provided in its top with an opening, a hook hinged to the draw-head and depending through the opening and adapted to be engaged by a link and provided at its inner end with an arm, and a weight depending from the hook and provided with a stem secured to the arm, substantially as described.

3. In a car coupling, the combination of a draw-head provided in its top with longitudinal and transverse openings, and hook 5 de-

pending through the longitudinal opening in the top of the draw-head and having a plate hinged to the latter and provided at opposite sides with depending transverse flanges arranged in the transverse opening, said plate being provided at one side with a hook 15 and at the opposite side with an arm, a weight suspended from the arm and arranged at one side of the draw-head, and means for engaging the hook 15 to lift the hook 5 for uncoupling, substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

WILLIAM H. BRILL.

Witnesses:
SAREPTO G. JOHNSTON,
E. C. JOHNSTON.